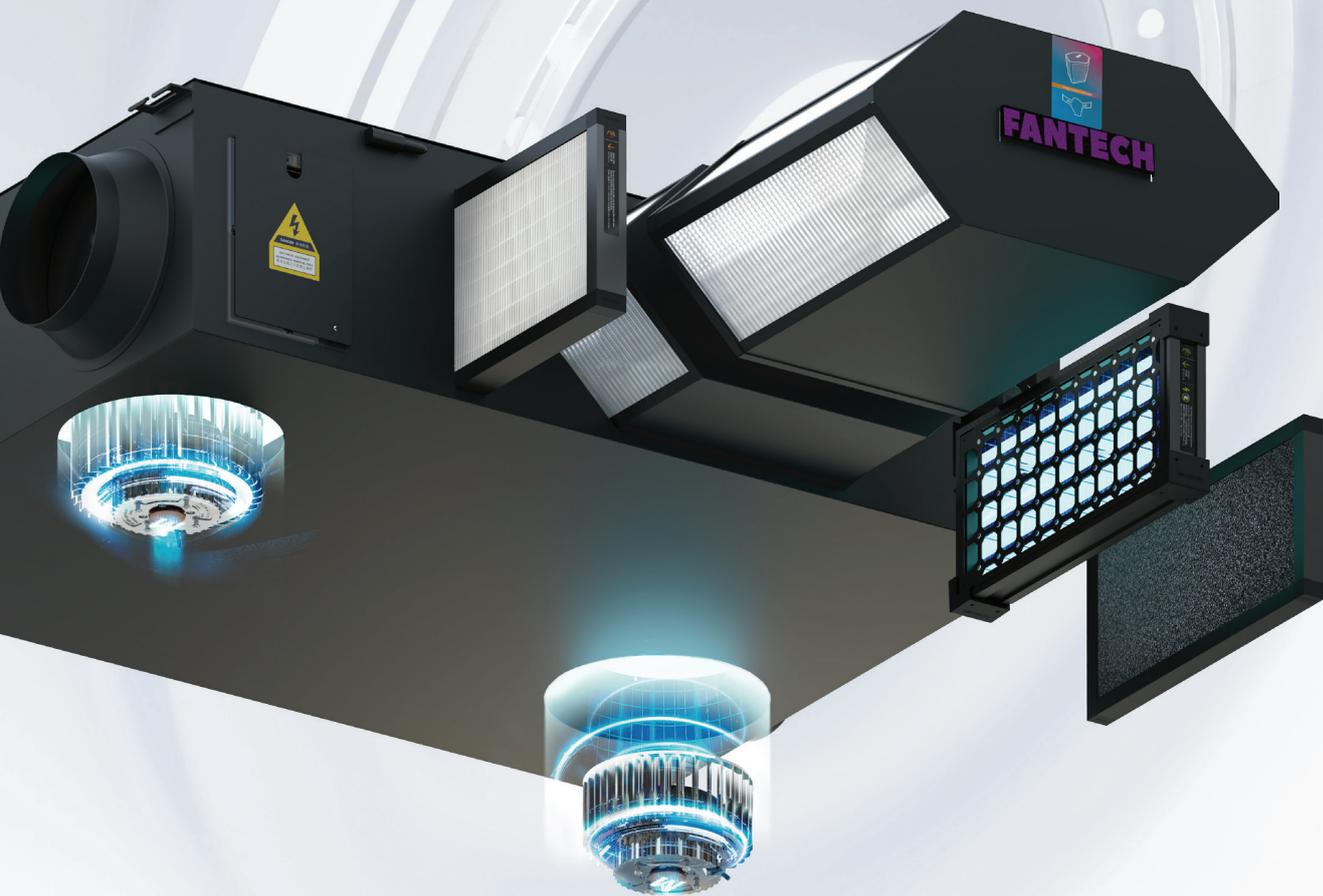


FANTECH

HRV



What is a recuperator?

The recuperator is a device that makes it possible to move the air from the indoor environment to the outdoor environment, and vice versa, to move the air from the outdoor environment to the indoor environment, simultaneously realizing the exchange of thermal energy between these two air currents.

As we explained above, the replacement of indoor air with clean air taken from the outside environment is necessary for human health and indoor air quality.

However, the conditioning of this air, which enters the environment from the outside environment, requires a lot of energy. Fantech recuperators not only fulfil the need of indoor environments for clean air but also recover the thermal energy of the treated air which is moved towards the external environment. This thermal energy is transmitted to the fresh air stream coming from the outside environment. Thanks to this innovative technology, the consumption of electricity for the treatment of newly introduced air is significantly reduced. Fantech guarantees you a system with high efficiency! Let's find out more about how they are built and how Fantech recuperators work.



How is a recuperator built?

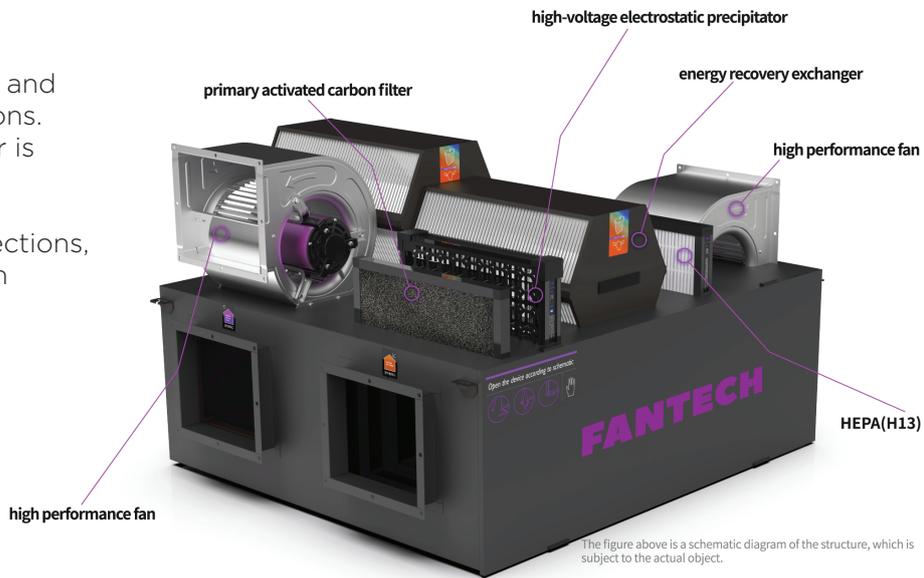
The exterior of the recuperator ensures stability and mechanical resistance to shocks and deformations. To minimize heat loss and noise, the recuperator is coated with thermoacoustic material.

Inside, two air currents circulate in opposite directions, facilitated by mechanical ventilation. The built-in aspirators move polluted air from the internal environment to the external environment while bringing in clean air from outside.

An advanced filtration system prevents the introduction of dirt, dust, and pollen, ensuring clean and healthy air.

The real magic happens inside the recuperator. The heat exchanger transfers thermal energy between the air streams, achieving maximum efficiency with its advanced, ultra-thin materials that require no maintenance. The use of acoustic materials further reduces noise.

The recuperator boasts a heat recovery efficiency of up to 90%. Using the Fantech recuperator significantly improves indoor air quality and reduces electricity consumption for air conditioning or air treatment.



Scheme of how recuperators work

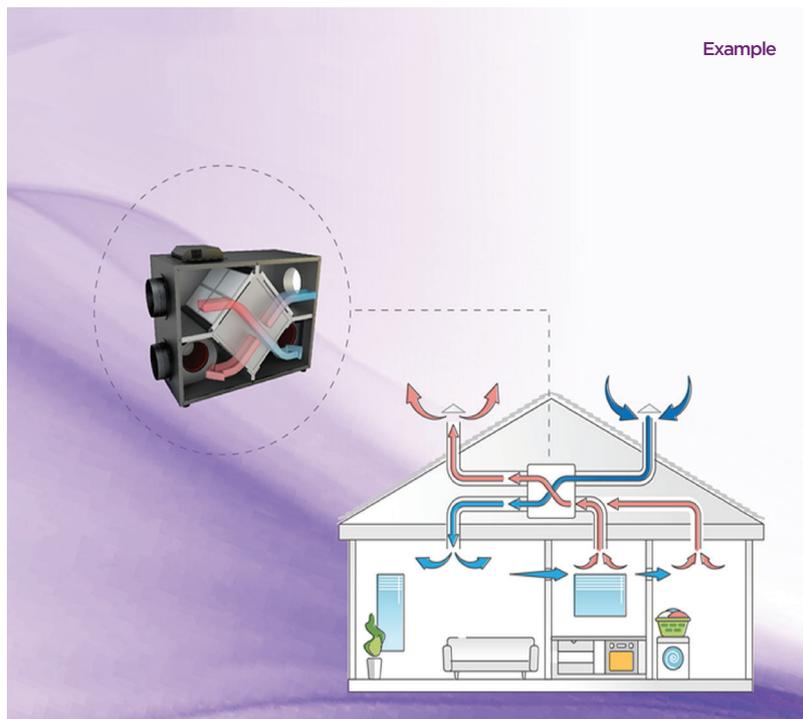
Example 1

in summer, the room is cooled, when indoor 26°C air passes through the heat exchange core, the cold energy will be recovered by the heat exchange core and discharged to the outside.

When outdoor 33°C air passes through the heat exchange core for cooling exchange, the temperature is about 27°C when it is sent into the room, so as to maintain the indoor temperature unchanged while ventilating, to realize energy-saving.

Example 2

In winter, the room is heated, when indoor 20°C air passes through the heat exchange core, the heat energy will be recovered by the heat exchange core and discharged to the outside. When outdoor 33°C air passes through the heat exchange core for heating exchange, the temperature is about 18°C when it is sent into the room, so as to maintain the indoor temperature unchanged while ventilating, to realize energy-saving.



Why do you need a recuperator?

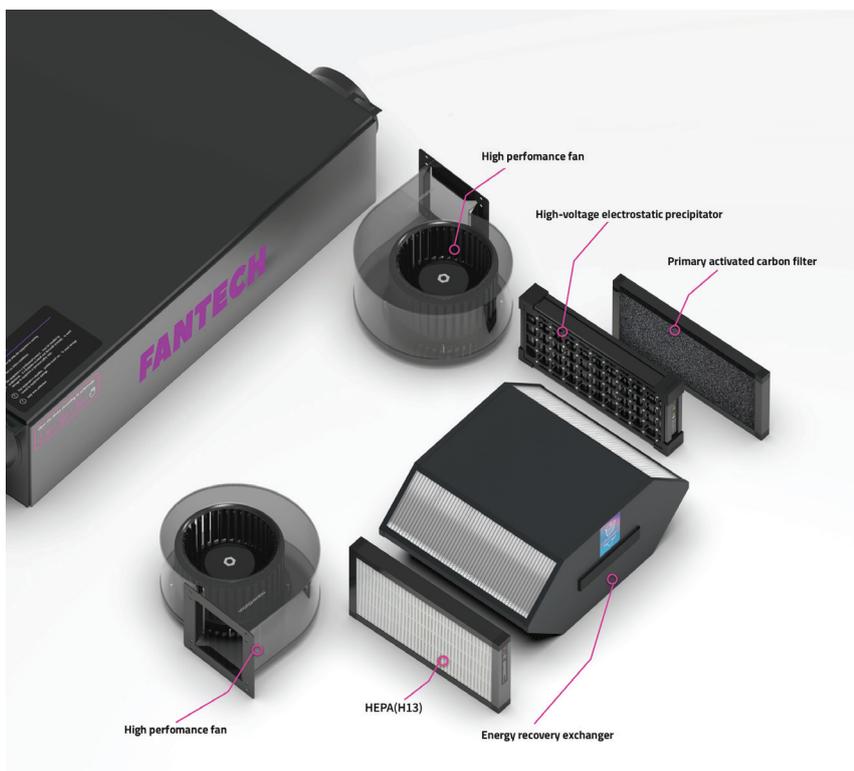
The need for clean and healthy air in closed premises.

People spend more than 85% of their lives indoors. For this reason, the air quality in these premises is closely related to human health. Human health = air + water + food + physical activity. All four are necessary to have a healthy life. Fantech helps you in providing an environment with clean air and optimal parameters.

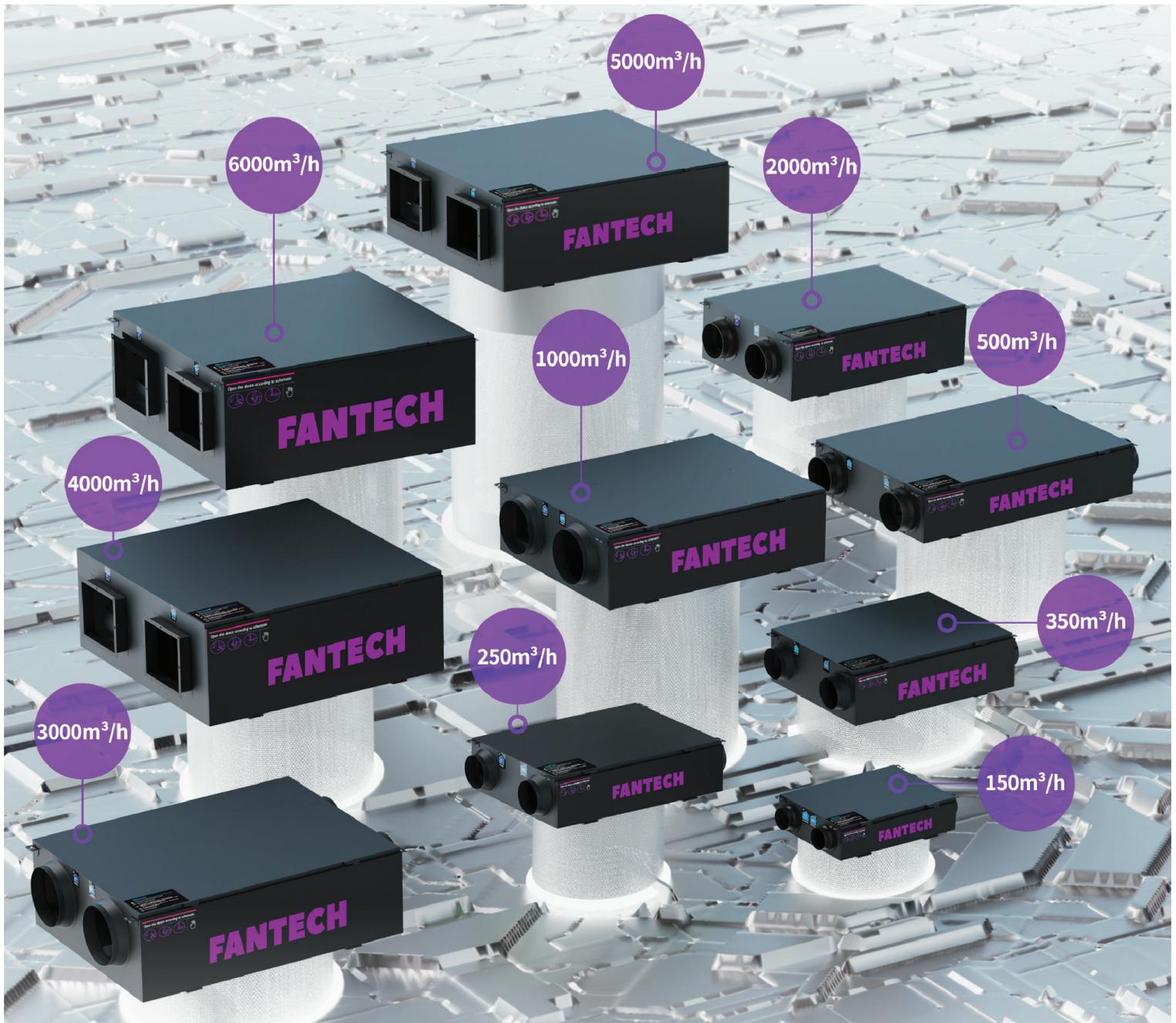
The new concept of health.

The high level of insulation in air-conditioned premises and the need to prevent heat losses often necessitate the replacement of natural ventilation (through windows) Mechanical ventilation systems, such as fans, are capable of completely replacing the air in a room. This process transforms a closed room with polluted air into a space with fresh, clean air, thereby ensuring optimal air quality.

In closed environments, the concentration of air pollutants—such as tobacco smoke, dust particles, and volatile aromatic substances—can be significantly reduced through mechanical ventilation. By continuously replacing polluted indoor air with fresh air from outside, mechanical ventilation systems help maintain a healthier indoor environment.



Technical characteristics



FANTECH RECOVERY VENTILATORS - SLIM SERIES

Model	Volume	Efficiency	Power	Voltage	Pressure	Noise	Dimensions (L x W x H)
FTC-H50N	500 m ³ /h	86-94 %	120 W	220 V	160 Pa	30 dB(A)	1110 x 845 x 260 mm
FTC-H100N	1000 m ³ /h	86-91 %	260 W	220 V	170 Pa	36 dB(A)	1143 x 809 x 342 mm
FTC-H150N	1500 m ³ /h	85-88 %	285 W	220 V	175 Pa	44 dB(A)	1143 x 809 x 342 mm
FTC-H200N	2000 m ³ /h	85-90%	330 W	220 V	205 Pa	48 dB(A)	1150 x 888 x 350 mm
FTC-H250N	2500 m ³ /h	85-89%	360 W	220 V	260 Pa	51 dB(A)	1150 x 888 x 350 mm
FTC-H300N	3000 m ³ /h	87-91%	480 W	220 V	260 Pa	52 dB(A)	1200 x 904 x 381 mm
FTC-H350N	3500 m ³ /h	86-91%	560 W	220 V	265 Pa	55 dB(A)	1200 x 904 x 381 mm
FTC-H400N	4000 m ³ /h	86-92%	600 W	220 V	280 Pa	57 dB(A)	1200 x 1160 x 476 mm
FTC-H450N	4500 m ³ /h	86-91%	780 W	220 V	285 Pa	61 dB(A)	1200 x 1160 x 476 mm
FTC-H500N	5000 m ³ /h	86-90%	900 W	220 V	320 Pa	64 dB(A)	1300x1160x476 mm
FTC-H550N	5500 m ³ /h	86-91%	980W	220 V	320 Pa	64 dB(A)	1300 x 1160 x 476 mm
FTC-H600N	6000 m ³ /h	85-91%	1100W	220 V	330 Pa	65 dB(A)	1320x1160x550 mm

